

Title (en)
IMMUNOCHROMATOGRAPHIC TEST STRIP FOR DETECTING OBJECT IN RED BLOOD CELL-CONTAINING SAMPLE

Title (de)
IMMUNCHROMATOGRAFISCHER TESTSTREIFEN ZUR ERKENNUNG EINES OBJEKTS IN EINER ERYTHROZYTENHALTIGEN PROBE

Title (fr)
BANDE D'ESSAI IMMUNOCHROMATOGRAPHIQUE POUR DÉTECTER UN OBJET DANS UN ÉCHANTILLON CONTENANT DES GLOBULES ROUGES

Publication
EP 3351937 A1 20180725 (EN)

Application
EP 18157585 A 20130401

Priority

- JP 2012083165 A 20120330
- EP 13768086 A 20130401
- JP 2013060003 W 20130401

Abstract (en)
A problem to be solved by the present invention is to provide an immunochromatographic test strip that can avoid aggregation of colloidal gold conjugates while red blood cells in whole blood are agglutinated and then separated and removed in the case of using hexadimethrine bromide as a blood-agglutinating agent and the colloidal gold conjugates as a detection reagent. To solve the problem, the present inventors reviewed a past reagent configuration itself from a completely different viewpoint rather than selecting type and amount of polyanions and, as a result of extensive study on each element, the inventors surprisingly found that aggregation of colloidal gold can be suppressed by a certain buffer solution without using neutralization by polyanions, wherein a buffer solution component is impregnated in a conjugate-retaining part in the test strip, the buffer solution component is selected from a group consisting of Bis-Tris, MES, and citric acid, and wherein Bis-Tris and MES are at pH lower than pKa.

IPC 8 full level
G01N 33/558 (2006.01); **G01N 33/543** (2006.01)

CPC (source: EP US)
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Citation (applicant)

- JP H03205563 A 19910909 - ABBOTT LAB
- JP H0599918 A 19930423 - BOEHRINGER MANNHEIM GMBH
- JP 2002509254 A 20020326
- KOHLER; MILSTEIN, NATURE, vol. 256, 1975, pages 495

Citation (search report)

- [A] US 2011117636 A1 20110519 - BAE BYEONG-WOO [KR], et al
- [AD] WO 9936781 A1 19990722 - ABBOTT LAB [US]
- [A] JP 2011141252 A 20110721 - TANAKA PRECIOUS METAL IND
- [T] EP 2833145 A1 20150204 - SEKISUI MEDICAL CO LTD [JP]
- [A] NARIO KUSANO ET AL: "Immunochromatographic assay for simple and rapid detection of Satsuma dwarf virus and related viruses using monoclonal antibodies", JOURNAL OF GENERAL PLANT PATHOLOGY, SPRINGER-VERLAG, TO, vol. 73, no. 1, 16 February 2007 (2007-02-16), pages 66 - 71, XP019476632, ISSN: 1610-739X, DOI: 10.1007/S10327-006-0316-6

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